# Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin

MA0012 Sutter Maintenance Yard Maintenance	Overall LMA Rating	Total LMA Miles						
Area 0012	A	11.06						
Rated Item			nce Deficiency		Enforc	ement	Design & System Obsolescence	
Rated item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments					0.05	2.28		
Animal Control	0.01		0.01	0.09%				
Supplemental								
DWR UCIP Field Study					0.07			
DWR UCIP LMA Responsibility								
LMA Totals:	0.01	0.00	0.01	0.09%	0.12	2.28	0.00	0.00
Unit No. 01 Colusa Drain LB	Overall Unit Rating	Total Unit Miles						
MA0012	Α	11.06						
Rated Item		Maintena	nce Deficiency		Enforcement		Design & System Obsolescence	
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
					0.05	2.28		
Encroachments					0.00	2.20		
Encroachments Animal Control	0.01		0.01	0.09%	0.00	2.20		
	0.01		0.01	0.09%	0.00	2.20		
Animal Control	0.01		0.01	0.09%	0.07	2.20		
Animal Control Supplemental	0.01		0.01	0.09%		2.20		

Winter \*\*

#### Flood Control Project Maintenance Levee Inspections

#### **LMA District Cover Sheet**

Fall 2018 Levee Inspection Results

# **Sutter Maintenance Yard Maintenance Area 0012**

Spring

Summer \*\*

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)	A			
*	** Non-receipt of Summ Reports may effect o			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated				ual maintenance
FALL INSPECTIONS: The overall maintenar within the attached un			ation and maintenance de rended to be an indiction of	
Comments				

# **Unit Cover Sheet**

#### Fall 2018 Levee Inspection Results

# **Sutter Maintenance Yard Maintenance Area 0012**

	Waterway	Bank	Unit Miles
Un	it No. 01 Colusa Drain	Left	11.06

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	4/18/2018 - 4/18/2018		10/9/2018 - 10/9/2018	
DWR Inspector	Bob Duffey		Zach Jojola	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# **Levee Inspection Report By Mile - Fall 2018**

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start		Rating **	Α	Issue No.		12	
LM End		Issue Type +	Ma	Location * N/A			
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item		y Supplies &			0		0
item	Equipmer	nt			0		0
DWR ID DWR_MA0012_01_s _ 2013_12							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
The LMA has adequate flood fight supplies and equipment.							

No Photos

LM Start		Rating **	Α	Issue No.		13	
LM End		Issue Type +	Ma	Location *	N/A		
Category Earthen Levee			GPS La	atitud	de/Longitude		
Calegory				Start		End	
Item		s & Maintena	nce		0	0	
пеш	Manuals				0	0	
DWR ID	DWR_MA0	012_01_s _ 201	13_13				
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
The LMA h	The LMA has the O&M manuals.						

No Photos

LM Start		Rating **	Α	Issue No.		14	
LM End		Issue Type +	Ма	Location *		N/A	
Category	Earthen L	evee		GPS La	atituc	de/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_MA0	012_01_s _ 201	3_14				
		Comn	nent Cod	le			
			•				
		Inspecto	or Comm	ient			
The LMA o	The LMA completed flood fight training in 2016.						

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	0.24	Rating **	М	Issue No.		42
LM End	0.24	Issue Type +	En	Location *		
Supplemental Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.03588	9°	39.035889°
item				-121.99688	2°	-121.996882°
DWR ID	17145					·

#### Inspector Comment

Comment Code

FS\_ID:51778 DS\_ID:17145 EP\_NO: 9381

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/2/2017 Abandoned- needs to be done so properly.

Only the LS standpipe was found. (DWR Sutter Yard-AFreitag)10/17/2016 Abandoned (DWR Sutter Yard-

AFreitag)5/31/2016 Abandoned- only the LS concrete standpipe was found.5/4/2015 Abandoned crossing.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Need to verify proper abandonment of pipe. FIELD\_STRUCT\_DESC: \*ABANDONED\* 14-inch steel irrigation pipe through the levee, 3 feet below the crown. Open on the waterside (WS) end. 3-foot by 6-foot concrete well on the WS berm. Siphon breaker in 24-inch riser located on the landside (LS) shoulder. 36-inch concrete standpipe on the LS toe. The only item identified is the 36-inch standpipe on the LS toe. (Automatic Board Order (ABO) issued as Permit No. 9381, 1974 - F. L. Tribble). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 0.22, Drawing No. 50-4-3081)].

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36-inch concrete riser on LS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	0.49	Rating **	М	Issue No.		43	
LM End	0.49	Issue Type +	Ma	Location *			
Category	Suppleme	Supplemental				e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.03941	3°	39.039413	0
пеш				-121.99776	3°	-121.997766	0
DWR ID	17146						

#### Inspector Comment

Comment Code

FS ID:51779 DS ID:17146 EP NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS is in good condition. LS inlet is more than 50% full of sediment. Pipe needs to be cleaned internally. (DWR Sutter Yard- AFreitag)10/17/2016 Minor sediment blocking the WS flap gate from opening. LS inlet still mostly full of sediment.(DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent WS flap gate is closed for flood season. Need to coordinate with owner to remove sediment blocking WS flap gate. (DWR UCIP - omagana)5/31/2016 WS flap gate is blocked from openeing by sediment. LS inlet is over 50% full of sediment. (DWR Sutter Yard - afreitag)5/4/2015 WS flap gate is blocked by sediment and unable to open. LS inlet is about 50% plugged with soil. Needs to be cleaned. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Sediment against flapgate has been cleared and it can now function properly. (DWR Sutter Yard - afreitag)7/16/2013 Sediment is built up against WS flapgate preventing it from opening. (DWR Sutter Yard afreitag)10/11/2012 Pipe is partially filled with soil. (DWR UCIP wwylie)

FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9385, 1974 Jackson S. King). [Additional Reference(s): DWR Levee Log references ABO 9382, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 0.49, Drawing No. 50-4-3081)].

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Intake at LS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	0.49	Rating **	М	Issue No.	43 (cont)			
LM End	0.49	Issue Type +	Ма	Location *				
Category	GPS La	tituc	de/Longitude					
Calegory				Start	End			
Item	DWR UC	P LMA Respo	nsibility	39.0394	ı3°	39.039413	۰	
пеш				-121.99776	66°	-121.997766	0	
DWR ID 17146								
	Comment Code							

#### Inspector Comment

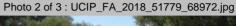
FS ID:51779 DS ID:17146 EP NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS is in good condition. LS inlet is more than 50% full of sediment. Pipe needs to be cleaned internally. (DWR Sutter Yard- AFreitag)10/17/2016 Minor sediment blocking the WS flap gate from opening. LS inlet still mostly full of sediment.(DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent WS flap gate is closed for flood season. Need to coordinate with owner to remove sediment blocking WS flap gate. (DWR UCIP - omagana)5/31/2016 WS flap gate is blocked from openeing by sediment. LS inlet is over 50% full of sediment. (DWR Sutter Yard - afreitag)5/4/2015 WS flap gate is blocked by sediment and unable to open. LS inlet is about 50% plugged with soil. Needs to be cleaned. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Sediment against flapgate has been cleared and it can now function properly. (DWR Sutter Yard - afreitag)7/16/2013 Sediment is built up against WS flapgate preventing it from opening. (DWR Sutter Yard afreitag)10/11/2012 Pipe is partially filled with soil. (DWR UCIP wwylie)

FIELD STRUCT DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9385, 1974 Jackson S. King). [Additional Reference(s): DWR Levee Log references ABO 9382, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 0.49, Drawing No. 50-4-3081)].

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Outlet at WS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	0.49	Rating **	М	Issue No.		43 (cont)
LM End	0.49	Issue Type +	Ма	Location *		
Category	Suppleme	GPS Latitude/Longitud				
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.03941	3°	39.039413°
пеш			-121.99776	6°	-121.997766°	
DWR ID	17146					·

#### Inspector Comment

Comment Code

FS\_ID:51779 DS\_ID:17146 EP\_NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS is in good condition. LS inlet is more than 50% full of sediment. Pipe needs to be cleaned internally. (DWR Sutter Yard- AFreitag)10/17/2016 Minor sediment blocking the WS flap gate from opening. LS inlet still mostly full of sediment.(DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent WS flap gate is closed for flood season. Need to coordinate with owner to remove sediment blocking WS flap gate. (DWR UCIP - omagana)5/31/2016 WS flap gate is blocked from openeing by sediment. LS inlet is over 50% full of sediment. (DWR Sutter Yard - afreitag)5/4/2015 WS flap gate is blocked by sediment and unable to open. LS inlet is about 50% plugged with soil. Needs to be cleaned. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Sediment against flapgate has been cleared and it can now function properly. (DWR Sutter Yard - afreitag)7/16/2013 Sediment is built up against WS flapgate preventing it from opening. (DWR Sutter Yard afreitag)10/11/2012 Pipe is partially filled with soil. (DWR UCIP wwylie)

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9385, 1974 - Jackson S. King). [Additional Reference(s): DWR Levee Log references ABO 9382, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 0.49, Drawing No. 50-4-3081)].

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#### Photo 3 of 3: UCIP\_FA\_2018\_51779\_68971.jpg



Inlet and concrete headwall on LS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.38	Rating **	A/W	Issue No.		44
LM End	1.38	Issue Type +	Ма	Location *		
Category Supplemental GPS Latitu				itud	e/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.05128	o°	39.051280°
пеш				-122.00298	1 °	-122.002981 °
DWR ID	17147					

#### Inspector Comment

Comment Code

FS\_ID:51780 DS\_ID:17147 EP\_NO: 9382

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. This is a gravity for the LS.(DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Crossing is in good condition. No

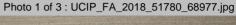
issues.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection 7/16/2013. Same as last inspection.

last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe [HLM 1.40] authorized under Automatic Board Order (ABO) issued as Permit No. 9382, 1974 - Olen C. Bober). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.4)]. FS Date: 5/2/2017 1:40:20 PM

 LM Start
 1.38
 Rating \*\*
 A/W
 Issue No.
 44 (cont)

 LM End
 1.38
 Issue Type +
 Ma
 Location \*





Intake on LS toe.

#### Photo 2 of 3: UCIP\_FA\_2018\_51780\_68976.jpg



Outlet at WS toe.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence
C: Corrected Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.38	Rating **	A/W	Issue No.		44 (cont)
LM End	1.38	Issue Type +	Ма	Location *		
Category			GPS Lat	itud	e/Longitude	
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.05128	0°	39.051280 °
пеш				-122.00298	1 °	-122.002981 °
DWR ID	17147					

#### Inspector Comment

Comment Code

FS ID:51780 DS\_ID:17147 EP\_NO: 9382

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. This is a gravity for the LS.(DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Crossing is in good condition. No

issues.6/17/2014 Same as last inspection.12/16/2013 Same as

last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe [HLM 1.40] authorized under Automatic Board Order (ABO) issued as Permit No. 9382, 1974 -Olen C. Bober). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.4)]. FS Date: 5/2/2017 1:40:20 PM

# Photo 3 of 3: UCIP\_FA\_2018\_51780\_68975.jpg



Concrete U shaped headwall on LS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.51	Rating **	М	Issue No. 45		45
LM End	1.51	Issue Type +	En	Location *		
Category	Supplemental		ental			le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.05307	4 °	39.053074°
пеш				-122.00315	7°	-122.003157°
DWR ID	17148					

#### Inspector Comment

Comment Code

FS\_ID:51781 DS\_ID:17148 EP\_NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS is being overgrown with vegetation. The rest of the crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Vegetation is overgrowing the WS head wall near the pump. The rest of the crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Crossing appears in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

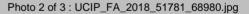
FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 3 feet below the crown. Pump, butterfly valve, and concrete headwall at the edge of the bank. Bank cobble revetted 10 feet on both the waterside (WS) and the landside (LS) of installation. 18-inch polyvinyl chloride (PVC) standpipe on the LS berm. Siphon breaker in 18-inch concrete riser on the LS shoulder. Service pole at the edge of the bank. (24-inch [HLM 1.53] authorized under Automatic Board Order (ABO) issued as Permit No. 9382, 1974 - Olen C. Bober) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.53)].

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LM Start	1.51	Rating **	М	Issue No.	45 (cont)
LM End	1.51	Issue Type +	En	Location *	



Pump, pole, and meter on WS toe.





Concrete and PVC risers on LS.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.51	Rating **	M	Issue No.		45 (cont)	
LM End	1.51	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.05307	4 °	39.053074	0
пеш				-122.00315	7 °	-122.003157	0
DWR ID	17148						

#### Inspector Comment

Comment Code

FS ID:51781 DS\_ID:17148 EP\_NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS is being overgrown with vegetation. The rest of the crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Vegetation is overgrowing the WS head wall near the pump. The rest of the crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Crossing appears in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation pipe through the levee, 3 feet below the crown. Pump, butterfly valve, and concrete headwall at the edge of the bank. Bank cobble revetted 10 feet on both the waterside (WS) and the landside (LS) of installation, 18-inch polyvinyl chloride (PVC) standpipe on the LS berm. Siphon breaker in 18-inch concrete riser on the LS shoulder. Service pole at the edge of the bank. (24-inch [HLM 1.53] authorized under Automatic Board Order (ABO) issued as Permit No. 9382, 1974 - Olen C. Bober) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 132, October 1959, (HLM 1.53)]. FS Date: 5/2/2017 1:47:19 PM

Photo 3 of 3: UCIP\_FA\_2018\_51781\_68979.jpg

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.69	Rating **	М	Issue No.		46	
LM End	1.69	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.0557	11 °	39.055711°	
item				-122.0032	52 °	-122.003252 °	
DWR ID	17149						

#### Inspector Comment

Comment Code

FS\_ID:51782 DS\_ID:17149 EP\_NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS flapgate buried by sediment. Needs to be dug out. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. This is a gravity drain for the LS. (DWR Sutter Yard- AFreitag)5/31/2016 LS inlets was partially plugged. WS flapgate was clear of sediment and abale to operate properly.5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is plugged by silt and wood chippings. Needs to be cleaned.6/17/2014 Flap gate was cleaned out and is fully closed. LS inlet still partially full of soil.12/16/2013 Same as last inspection. WS flapgate still needs to be cleaned out and shut.7/16/2013 Same as last inspection. Make sure flapgate is closed before highwater season.10/11/2012 Inlet on LS filled partially with soil. Outlet blocked with soil and the flap gate wont close.

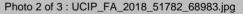
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe [HLM 1.72] authorized under Automatic Board Order (ABO) issued as Permit No. 9382, 1974 - Olen C. Bober). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.72)].

FS Date: 5/2/2017 1:50:52 PM

LM Start	1.69	Rating **	М	Issue No.	46 (cont)
LM End	1.69	Issue Type +	Ma	Location *	



Outlet on WS toe.





Inlet on LS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.69	Rating **	М	Issue No.	46 (cont)			
LM End	1.69	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory				Start	End			
Item	DWR UCI	P LMA Respo	nsibility	39.0557	11 °	39.055711°		
item				-122.0032	52 °	-122.003252°		
DWR ID	DWR ID 17149							
	Comment Code							

# Inspector Comment

FS ID:51782 DS\_ID:17149 EP\_NO: 9382

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS flapgate buried by sediment. Needs to be dug out. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. This is a gravity drain for the LS. (DWR Sutter Yard- AFreitag)5/31/2016 LS inlets was partially plugged. WS flapgate was clear of sediment and abale to operate properly.5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is plugged by silt and wood chippings. Needs to be cleaned.6/17/2014 Flap gate was cleaned out and is fully closed. LS inlet still partially full of soil.12/16/2013 Same as last inspection. WS flapgate still needs to be cleaned out and shut.7/16/2013 Same as last inspection. Make sure flapgate is closed before highwater season.10/11/2012 Inlet on LS filled partially with soil. Outlet blocked with soil and the flap gate wont close.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe [HLM 1.72] authorized under Automatic Board Order (ABO) issued as Permit No. 9382, 1974 -Olen C. Bober). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.72)]. FS Date: 5/2/2017 1:50:52 PM

Photo 3 of 3: UCIP\_FA\_2018\_51782\_68982.jpg



Concrete U shaped headwall at LS inlet.

CR : Crown

Ma: Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.77	Rating **	A/W	Issue No.		47
LM End	1.77	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.05684	7°	39.056847°
пеш				-122.00328	8 °	-122.003288°
DWR ID	17150					·

# Inspector Comment

Comment Code

FS ID:51785 DS\_ID:17150 EP\_NO: 9387

LM End

1.77

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition. Attatched photo showing location of LS inlet.5/4/2015 WS flapgate mostly underwater but could tell it was blocked open by something. LS inlet is located about 1/4 mile north along the side of the roadway.6/17/2014 Same as last inspection.12/16/2013 Pipe was flowing water and flap gate was bing

pushed open. Cannot verify if it will close all the way.7/16/2013 Same as last inspection. Was told inlet is about 1/4 mile down road way next to house. Will try to get coordinates for inlet.10/11/2012 No inlet could be located on LS. Flap gate partially blocked and will not close completely

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate in 60-inch riser on the waterside (WS) slope. Flap gate and concrete headwall on the WS. (48-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9387, 1974 - Lauretta S. Christenson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.8)]. FS Date: 5/2/2017 1:56:07 PM

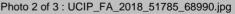
Rating \*\* A/W Issue No 1.77 47 (cont) LM Start

Location '

Issue Type +



60-inch standpipe with slide gate on WS slope with outlet in background.





Flap gate and concrete headwall at WS toe.

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N: Not Inspected/Rated WS: Water Side Minimally Acceptable Ob : Design & System Obsolescence C : Corrected CR: Crown U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement Page 12 of 57

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.77	Rating **	A/W	Issue No.	47 (cont)		
LM End	1.77	Issue Type +	Ма	Location *			
Category	ental		GPS Latitude/Longitude				
Calegory				Start End			
Item	DWR UCI	P LMA Respo	nsibility	39.0568	47°	39.056847°	
item				-122.0032	88 °	-122.003288 °	
DWR ID	DWR ID 17150						
	Comment Code						

#### Inspector Comment

FS\_ID:51785 DS\_ID:17150 EP\_NO: 9387

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition. Attatched photo showing location of LS inlet.5/4/2015 WS flapgate mostly underwater but could tell it was blocked open by something. LS inlet is located about 1/4 mile north along the side of the roadway.6/17/2014 Same as last inspection.12/16/2013 Pipe was flowing water and flap gate was bing pushed open. Cannot verify if it will close all the way.7/16/2013 Same as last inspection. Was told inlet is about 1/4 mile down road way next to house. Will try to get coordinates for inlet.10/11/2012 No inlet could be located on LS. Flap gate partially blocked and will not close completely.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 20 feet below the crown. Slide gate in 60-inch riser on the waterside (WS) slope. Flap gate and concrete headwall on the WS. (48-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9387, 1974 - Lauretta S. Christenson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 1.8)].

FS Date: 5/2/2017 1:56:07 PM



Arrow showing ocation of LS inlet

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.98	Rating **	М	Issue No.		48
LM End	1.98	Issue Type +	Ма	Location *		
Category				GPS La	titud	e/Longitude
Calegory	Category					End
Item	DWR UCI	39.05977	'3°	39.059773°		
item				-122.00439	11°	-122.004391°
DWR ID	17151					·

# Inspector Comment

Comment Code

FS ID:51786 DS\_ID:17151 EP\_NO: 9391

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Both ends of pipe buried. (DWR Sutter Yard- AFreitag)10/17/2016 Appears abandoned. Both pipe ends are completely buried. (DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent both pipe ends are buried. Having both ends buried prevents water from flowing from WS to LS during flood season. Need to contact owner and have owner coordinate with CVFPB to comply with Title 23. (DWR UCIP omagana)5/31/2016 Both pipe ends are buried. Pipe is nonoperational. (DWR Sutter Yard - afreitag)5/4/2015 LS and WS ends are blocked with soil. Pipe is inoperable as it is. (DWR Sutter Yard afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard afreitag)7/16/2013 LS inlet is completely filled with soil. Needs to be cleaned out. (DWR Sutter Yard - afreitag)10/11/2012 Inlet is partially filled with soil. (DWR Sutter Yard - wwylie)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9391, 1974 -Department of Water Resources, Northern District). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 2.02)].

FS Date: 5/2/2017 2:01:25 PM

# Photo 1 of 3: UCIP\_FA\_2018\_51786\_68994.jpg



WS view of outlet.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.98	Rating **	М	Issue No.		48 (cont)
LM End	1.98	Issue Type +	Ма	Location *		
Category	ental	GPS Lat	itud	e/Longitude		
Calegory	Category					End
Item	DWR UCI	DWR UCIP LMA Responsibility				39.059773°
item				-122.00439	1°	-122.004391 °
DWR ID	17151					·

#### Inspector Comment

Comment Code

FS\_ID:51786 DS\_ID:17151 EP\_NO: 9391

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Both ends of pipe buried. (DWR Sutter Yard- AFreitag)10/17/2016 Appears abandoned. Both pipe ends are completely buried. (DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent both pipe ends are buried. Having both ends buried prevents water from flowing from WS to LS during flood season. Need to contact owner and have owner coordinate with CVFPB to comply with Title 23. (DWR UCIP - omagana)5/31/2016 Both pipe ends are buried. Pipe is non-operational. (DWR Sutter Yard - afreitag)5/4/2015 LS and WS ends are blocked with soil. Pipe is inoperable as it is. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 LS inlet is completely filled with soil. Needs to be cleaned out. (DWR Sutter Yard - afreitag)10/11/2012 Inlet is partially filled with soil. (DWR Sutter Yard - awylie)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9391, 1974 - Department of Water Resources, Northern District). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 132, October 1959, (HLM 2.02)]. FS Date: 5/2/2017 2:01:25 PM

Photo 2 of 3 : UCIP\_FA\_2018\_51786\_68993.jpg



LS view of inlet.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	1.98	Rating **	М	Issue No.		48 (cont)
LM End	1.98	Issue Type +	Ма	Location *		
Category	ental	GPS La	titud	e/Longitude		
Calegory	Category					End
Item	DWR UCI	39.05977	'3°	39.059773°		
item				-122.00439	11°	-122.004391°
DWR ID	17151					·

# Inspector Comment

Comment Code

FS\_ID:51786 DS\_ID:17151 EP\_NO: 9391

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Both ends of pipe buried. (DWR Sutter Yard- AFreitag)10/17/2016 Appears abandoned. Both pipe ends are completely buried. (DWR Sutter Yard- AFreitag)9/29/2016 Crossing has been downgraded from Urgent to Non-Urgent both pipe ends are buried. Having both ends buried prevents water from flowing from WS to LS during flood season. Need to contact owner and have owner coordinate with CVFPB to comply with Title 23. (DWR UCIP - omagana)5/31/2016 Both pipe ends are buried. Pipe is nonoperational. (DWR Sutter Yard - afreitag)5/4/2015 LS and WS ends are blocked with soil. Pipe is inoperable as it is. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 LS inlet is completely filled with soil. Needs to be cleaned out. (DWR Sutter Yard - afreitag)10/11/2012 Inlet is partially filled with soil. (DWR Sutter Yard - wwylie)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9391, 1974 - Department of Water Resources, Northern District). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 132, October 1959, (HLM 2.02)].

FS Date: 5/2/2017 2:01:25 PM



Concrete U shaped headwall at LS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	2.58	Rating **	U	Issue No.		34		
LM End	3.01	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	ments	39.0673	42°	39.072267°				
item				-122.0095	30°	-122.014443 °		
DWR ID DWR_MA0012_01_f _ 2016_34								
	Comment Code							
DT : Ditch								
Inspector Comment								

Photo 1 of 1 : FA\_2018\_MA0012\_299\_34\_20180904\_00003.jpg



View of a ditch along the landside toe.

LM Start	3.01	Rating **	U	Issue No.		1		
LM End	3.68	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Encroachments					39.081684°		
item	item					-122.016243°		
DWR ID DWR_MA0012_01_s _ 2012_1								
		Comn	nent Cod	de				
DT : Ditch								
			_					
Inspector Comment								

# Photo 1 of 1 : FA\_2018\_MA0012\_299\_1\_20180904\_00001.jpg



View of a ditch along the landside toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	3.15	Rating **	A/W	Issue No.		49
LM End	3.15	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	Calegory					End
Item	DWR UCI	nsibility	39.07415	1°	39.074151 °	
item				-122.01496	o°	-122.014960 °
DWR ID	17153					

#### Inspector Comment

Comment Code

FS\_ID:51788 DS\_ID:17153 EP\_NO: 9384

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Crossing appears in good condition. No noticeable issues.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 16 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe [HLM 3.22] authorized under Automatic Board Order (ABO) issued as Permit No. 9384, 1974 - William D. Struckmeyer) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 3.22)].

FS Date: 5/2/2017 2:04:40 PM

LM Start	3.15	Rating **	A/W	Issue No.	49 (cont)
LM End	3.15	Issue Type +	Ma	Location *	



Concrete headwall at LS toe.

#### Photo 2 of 3: UCIP\_FA\_2018\_51788\_69001.jpg



Drainage Swale on WS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	3.15	Rating **	A/W	Issue No.		49 (cont)			
LM End	3.15	Issue Type +	Ма	Location *					
Category	Supplemental			Supplemental			GPS Lat	itud	e/Longitude
Calegory				Start		End			
Item	DWR UCI	P LMA Respo	onsibility	39.07415	1°	39.074151°			
пеш				-122.01496	o°	-122.014960°			
DWR ID	17153								

#### Inspector Comment

Comment Code

FS ID:51788 DS\_ID:17153 EP\_NO: 9384

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Crossing appears in good condition. No noticeable issues.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 16 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway on the waterside (WS). Concrete headwall on the landside (LS). (24-inch pipe [HLM 3.22] authorized under Automatic Board Order (ABO) issued as Permit No. 9384, 1974 -William D. Struckmeyer) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 3.22)].

FS Date: 5/2/2017 2:04:40 PM

# Photo 3 of 3: UCIP\_FA\_2018\_51788\_69000.jpg



Concrete headwall and flap gate at WS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	3.69	Rating **	М	Issue No.		50		
LM End	3.69	Issue Type +	Ma	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UC	IP LMA Respo	nsibility	39.0819	49°	39.081949°		
пеш				-122.0161	79°	-122.016179°		
DWR ID 17154								
Comment Code								

#### Inspector Comment

FS\_ID:53011 DS\_ID:17154 EP\_NO: 9388

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Fall hazard: missing cover on CMP riser. Closure devices are present on both ends of crossing and seem to be in operable condition. Downgraded to non-urgent. Recommend owner add cover to CMP riser. (O.Yakimov - DWR)5/2/2017 WS slidegate stem is still bent, wheel to operate gate is missing. Needs a cover made for the standpipe to prevent falls. (DWR Sutter Yard-AFreitag)10/17/2016 Slide gate stem is still and and the gate appears to be inoperable. (DWR Sutter Yard- AFreitag)5/31/2016 SLide gate stem is still bent. WS flap gate is chained open. (DWR Sutter Yard afreitag)5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Slide gate stem is still bent. WS flapgate was closed. (DWR Sutter Yard - afreitag)7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season. (DWR Sutter Yard - afreitag)10/11/2012 Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 28 feet below the crown. Slide gate in a 66-inch riser on the waterside (WS) slope. Concrete headwall on the WS. Grouted cobble spillway from drainage ditch to large canal on the landside (LS). (48-inch pipe [HLM 3.78] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 3.78)]. FS Date: 10/5/2018 2:47:50 PM



View of levee crown at crossing.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	3.69	Rating **	М	Issue No.		50 (cont)		
LM End	3.69	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P LMA Respo	nsibility	39.0819	49°	39.081949°		
пеш				-122.0161	79°	-122.016179°		
DWR ID	17154							
	Comment Code							

#### Inspector Comment

FS ID:53011 DS ID:17154 EP\_NO: 9388

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Fall hazard: missing cover on CMP riser. Closure devices are present on both ends of crossing and seem to be in operable condition. Downgraded to non-urgent. Recommend owner add cover to CMP riser. (O.Yakimov - DWR)5/2/2017 WS slidegate stem is still bent, wheel to operate gate is missing. Needs a cover made for the standpipe to prevent falls. (DWR Sutter Yard-AFreitag)10/17/2016 Slide gate stem is still and and the gate appears to be inoperable. (DWR Sutter Yard- AFreitag)5/31/2016 SLide gate stem is still bent. WS flap gate is chained open. (DWR Sutter Yard afreitag)5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Slide gate stem is still bent. WS flapgate was closed. (DWR Sutter Yard - afreitag)7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season. (DWR Sutter Yard - afreitag)10/11/2012 Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 28 feet below the crown. Slide gate in a 66-inch riser on the waterside (WS) slope. Concrete headwall on the WS. Grouted cobble spillway from drainage ditch to large canal on the landside (LS). (48-inch pipe [HLM 3.78] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 3.78)]. FS Date: 10/5/2018 2:47:50 PM

Photo 2 of 3: UCIP\_FA\_2018\_53011\_69005.jpg



Slide gate in corrugated metal riser on WS slope.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	3.69	Rating **	М	Issue No.		50 (cont)	
LM End	3.69	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.0819	49°	39.081949°	
пеш				-122.0161	79°	-122.016179°	
DWR ID 17154							
Comment Code							

#### Inspector Comment

FS\_ID:53011 DS\_ID:17154 EP\_NO: 9388

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Fall hazard: missing cover on CMP riser. Closure devices are present on both ends of crossing and seem to be in operable condition. Downgraded to non-urgent. Recommend owner add cover to CMP riser. (O.Yakimov - DWR)5/2/2017 WS slidegate stem is still bent, wheel to operate gate is missing. Needs a cover made for the standpipe to prevent falls. (DWR Sutter Yard-AFreitag)10/17/2016 Slide gate stem is still and and the gate appears to be inoperable. (DWR Sutter Yard- AFreitag)5/31/2016 SLide gate stem is still bent. WS flap gate is chained open. (DWR Sutter Yard afreitag)5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Slide gate stem is still bent. WS flapgate was closed. (DWR Sutter Yard - afreitag)7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season. (DWR Sutter Yard - afreitag)10/11/2012 Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 28 feet below the crown. Slide gate in a 66-inch riser on the waterside (WS) slope. Concrete headwall on the WS. Grouted cobble spillway from drainage ditch to large canal on the landside (LS). (48-inch pipe [HLM 3.78] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 3.78)]. FS Date: 10/5/2018 2:47:50 PM

# Photo 3 of 3 : UCIP\_FA\_2018\_53011\_78205.jpg



Headwall with slide gate at LS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.15	Rating **	A/W	Issue No.		Issue No.		51
LM End	4.15	Issue Type +	Ма	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Itom	DWR UCI	DWR UCIP LMA Responsibility			1°	39.088561 °		
Item		-122.01517	9°	-122.015179°				
DWR ID	17168							

#### Inspector Comment

Comment Code

FS\_ID:51791 DS\_ID:17168 EP\_NO: 9388

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 27.5 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway located on the waterside (WS). Concrete headwall located on the landside (LS). (24-inch pipe [HLM 4.25] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 4.25)].

FS Date: 5/2/2017 2:08:40 PM

LM Start	4.15	Rating **	A/W	Issue No.	51 (cont)
LM End	4.15	Issue Type +	Ma	Location *	



Outlet at WS toe.

#### Photo 2 of 3: UCIP\_FA\_2018\_51791\_69013.jpg



Concrete U shaped headwall on LS toe.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.15	Rating **	A/W	Issue No.		51 (cont)	
LM End	4.15	Issue Type +	Ма	Location *			
Category	Suppleme	mental		GPS Latitude/Longi		le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	39.08856	1°	39.088561	0
пеш				-122.01517	9°	-122.015179	0
DWR ID	17168						

# Inspector Comment

Comment Code

FS\_ID:51791 DS\_ID:17168 EP\_NO: 9388

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 27.5 feet below the crown. Flap gate, concrete headwall, and grouted cobble spillway located on the waterside (WS). Concrete headwall located on the landside (LS). (24-inch pipe [HLM 4.25] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 4.25)].

FS Date: 5/2/2017 2:08:40 PM



Concrete U shaped headwall and flap gate on WS toe.

#### Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.22	Rating **	A/W	Issue No.		52			
LM End	4.22	Issue Type +	Ma	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory			Start		End				
Item	DWR UCI	P LMA Respo	onsibility	39.0895	51 °	39.089551 °			
пеш			-122.0152	41 °	-122.015241 °				
DWR ID	17156								

# Inspector Comment

Comment Code

FS\_ID:51792 DS\_ID:17156 EP\_NO: 9388

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

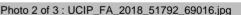
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pump on a 60-inch concrete standpipe at the landside (LS) toe. (24-inch pipe [HLM 4.32] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959. (JL M 4.32)]

October 1959, (HLM 4.32)]. FS Date: 5/2/2017 2:20:21 PM

LM Start	4.22	Rating **	A/W	Issue No.	52 (cont)
LM End	4.22	Issue Type +	Ma	Location *	



Pump on Concrete riser at LS toe.





Pipe through levee at LS slope.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.22	Rating **	A/W	Issue No.	52 (cont)		
LM End	4.22	Issue Type +	Ма	Location *			
Category	Suppleme	nental		GPS Latitude/Lo		le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	nsibility	39.08955	1°	39.089551	0
пеш				-122.01524	1 °	-122.015241	0
DWR ID	17156						

# Inspector Comment

Comment Code

FS\_ID:51792 DS\_ID:17156 EP\_NO: 9388

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pump on a 60-inch concrete standpipe at the landside (LS) toe. (24-inch pipe [HLM 4.32] authorized under Automatic Board Order (ABO) issued as Permit No. 9388, 1974 - Pauline A. Wallace). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132,

October 1959, (HLM 4.32)]. FS Date: 5/2/2017 2:20:21 PM

Photo 3 of 3 : UCIP\_FA\_2018\_51792\_69015.jpg



36-inch CMP riser with Slide gate on WS shoulder.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.23	Rating **	М	Issue No.		53	
LM End	4.23	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.08966	66°	39.089666°	
пеш				-122.01524	18°	-122.015248°	
DWR ID	20717						

#### Inspector Comment

Comment Code

FS\_ID:51794 DS\_ID:20717 EP\_NO: N/A

LM End

4.23

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection. Pump reinstalled on pier.12/16/2013 Pump has been removed for winter.7/16/2013 Same as last inspection.10/11/2012 No permit identified for this crossing.

FIELD\_STRUCT\_DESC: 24-inch asphalt coated steel irrigation pipe though the levee, 4.5 feet below the crown. Pump in pump house located on the waterside (WS) bank. Siphon breaker valve installed on the landside (LS) shoulder. No permit has been identified since crossing was field discovered in 2012.
FS Date: 5/2/2017 2:29:42 PM

LM Start 4.23 Rating \*\* M Issue No. 53 (cont)

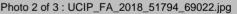
En

Location '

Issue Type +



Possible siphon breaker for pipe on LS shoulder.





Pumping plant on WS toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.23	Rating **	М	Issue No.		53 (cont)	
LM End	4.23	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.0896	66 °	39.089666°	
пеш				-122.0152	48 °	-122.015248°	
DWR ID	20717					·	

# Inspector Comment

Comment Code

FS\_ID:51794 DS\_ID:20717 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection. Pump reinstalled on pier.12/16/2013 Pump has been removed for winter.7/16/2013 Same as last inspection.10/11/2012 No permit identified for this crossing.

FIELD\_STRUCT\_DESC: 24-inch asphalt coated steel irrigation pipe though the levee, 4.5 feet below the crown. Pump in pump house located on the waterside (WS) bank. Siphon breaker valve installed on the landside (LS) shoulder. No permit has been identified since crossing was field discovered in 2012.

FS Date: 5/2/2017 2:29:42 PM

# Photo 3 of 3 : UCIP\_FA\_2018\_51794\_69021.jpg

Pipe on seft side of photo.

LM Start	4.72	Rating **	М	Issue No.		4		
LM End	4.77	Issue Type +	En	Location *		LS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Encroachi	ments		39.0968	39°	39.097455°		
пеш				-122.0155	68°	-122.015581 °		
DWR ID	DWR_MA0	012_01_s _ 201	2_4					
		Comn	nent Coc	de				
DT : Ditch								
	Inspector Comment							

#### Photo 1 of 1: FA\_2018\_MA0012\_299\_4\_20180904\_00002.jpg



View of a ditch along the landside toe.

# Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.76	Rating **	A/W	Issue No.		54
LM End	4.76	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Zategory			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.09737	'8	39.097378°
пеш				-122.01556	0°	-122.015560°
DWR ID	17158					

#### Inspector Comment

Comment Code

FS\_ID:51795 DS\_ID:17158 EP\_NO: 9390

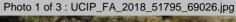
Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. There is minor sediment build up in front of the WS flap gate/ (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition. S/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 New flapgate installed on WS pipe end.10/11/2012 Flap gate broken on WS, Pipe shows significant rust at outlet. This is a good candidate for video inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe though the levee, 20 feet below the crown. Pump on metal pier in landside (LS) channel. 40-inch steel standpipe at the LS toe. Flap gate and concrete headwall on the waterside (WS). Concrete headwall on the LS. (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 4.87)].
FS Date: 5/2/2017 2:30:31 PM

 LM Start
 4.76
 Rating \*\*
 A/W
 Issue No.
 54 (cont)

 LM End
 4.76
 Issue Type +
 Ma
 Location \*





Outlet channel on WS toe.

Photo 2 of 3: UCIP\_FA\_2018\_51795\_69025.jpg



Pump, walkway, and standpipe on LS toe.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

#### Levee Inspection Report By Mile - Fall 2018

# **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	4.76	Rating **	A/W	Issue No.		54 (cont)
LM End	4.76	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category				Start	
Item	DWR UCI	P LMA Respo	nsibility	39.09737	8°	39.097378°
пеш				-122.01556	o°	-122.015560°
DWR ID	17158					

# Inspector Comment

Comment Code

FS\_ID:51795 DS\_ID:17158 EP\_NO: 9390

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. There is minor sediment build up in front of the WS flap gate/ (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition. 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 New flapgate installed on WS pipe end.10/11/2012 Flap gate broken on WS, Pipe shows significant rust at outlet. This is a good candidate for video inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe though the levee, 20 feet below the crown. Pump on metal pier in landside (LS) channel. 40-inch steel standpipe at the LS toe. Flap gate and concrete headwall on the waterside (WS). Concrete headwall on the LS. (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 4.87)].

FS Date: 5/2/2017 2:30:31 PM



Flap gate in concrete U-shaped headwall on WS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.01	Rating **	М	Issue No.		55
LM End	5.01	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.10089	8°	39.100898°
пеш			-122.01607	8°	-122.016078°	
DWR ID	17191					

# Inspector Comment

Comment Code

FS\_ID:51796 DS\_ID:17191 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS headwall and flapgate almost completely buried with only a small portion of the head wall visible. LS end is buried and unable to be located. (DWR Sutter Yard-AFreitag)10/17/2016 WS flap gate is still silted over and LS inlet is heavily vegetated and unable to be inspected. (DWR Sutter Yard-AFreitag)9/29/2016 Crosssing has been downgraded from Urgent to Non-Urgent WS flap gate is closed shut due to sediment build up. For flood season flap gate is required to be closed. Need to coordinate with owner to remove sediment from WS to have WS flap gate be operable after flood season. (DWR UCIP - omagana)5/31/2016 WS pipe end was mostly underwater but it appears to still be silted over. (DWR Sutter Yard - afreitag)5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is hidden by sediment and heavy vegetation and unable to be located. Needs to be cleared. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/11/2012 Pipe is clogged at both the inlet and outlet. Good candidate for video inspection. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, approximately 15 feet below the crown. Concrete headwalls on both the waterside (WS) and the landside (LS) ends with an automatic drainage gate on the WS. [Additional Reference(s): USACE Sacramento O&M Manual 132, October 1959, (HLM 5.12)]. FS Date: 5/2/2017 2:31:39 PM



Apparent inlet clogged with concrete or grout on LS toe in drainage swale.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.01	Rating **	М	Issue No.	55 (cont)		
LM End	5.01	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start End			
Item	DWR UCI	DWR UCIP LMA Responsibility			98 °	39.100898°	
пеш				-122.0160	78°	-122.016078°	
DWR ID 17191							
Comment Code							

# Inspector Comment

FS\_ID:51796 DS\_ID:17191 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS headwall and flapgate almost completely buried with only a small portion of the head wall visible. LS end is buried and unable to be located. (DWR Sutter Yard-AFreitag)10/17/2016 WS flap gate is still silted over and LS inlet is heavily vegetated and unable to be inspected. (DWR Sutter Yard-AFreitag)9/29/2016 Crosssing has been downgraded from Urgent to Non-Urgent WS flap gate is closed shut due to sediment build up. For flood season flap gate is required to be closed. Need to coordinate with owner to remove sediment from WS to have WS flap gate be operable after flood season. (DWR UCIP - omagana)5/31/2016 WS pipe end was mostly underwater but it appears to still be silted over. (DWR Sutter Yard - afreitag)5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is hidden by sediment and heavy vegetation and unable to be located. Needs to be cleared. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/11/2012 Pipe is clogged at both the inlet and outlet. Good candidate for video inspection. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, approximately 15 feet below the crown. Concrete headwalls on both the waterside (WS) and the landside (LS) ends with an automatic drainage gate on the WS. [Additional Reference(s): USACE Sacramento O&M Manual 132, October 1959, (HLM 5.12)]. FS Date: 5/2/2017 2:31:39 PM



Outlet on WS toe.

# Levee Inspection Report By Mile - Fall 2018

#### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.01	Rating **	М	Issue No.		55 (cont)
LM End	5.01	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory	Category			Start		End
Item	DWR UCI	IP LMA Respo	onsibility	39.10089	3°	39.100898°
пеш				-122.01607	3°	-122.016078°
DWR ID	17191					·

#### Inspector Comment

Comment Code

FS ID:51796 DS\_ID:17191 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 WS headwall and flapgate almost completely buried with only a small portion of the head wall visible. LS end is buried and unable to be located. (DWR Sutter Yard-AFreitag)10/17/2016 WS flap gate is still silted over and LS inlet is heavily vegetated and unable to be inspected. (DWR Sutter Yard-AFreitag)9/29/2016 Crosssing has been downgraded from Urgent to Non-Urgent WS flap gate is closed shut due to sediment build up. For flood season flap gate is required to be closed. Need to coordinate with owner to remove sediment from WS to have WS flap gate be operable after flood season. (DWR UCIP - omagana)5/31/2016 WS pipe end was mostly underwater but it appears to still be silted over. (DWR Sutter Yard - afreitag)5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is hidden by sediment and heavy vegetation and unable to be located. Needs to be cleared. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/11/2012 Pipe is clogged at both the inlet and outlet. Good candidate for video inspection. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, approximately 15 feet below the crown. Concrete headwalls on both the waterside (WS) and the landside (LS) ends with an automatic drainage gate on the WS. [Additional Reference(s): USACE Sacramento O&M Manual 132, October 1959, (HLM 5.12)]. FS Date: 5/2/2017 2:31:39 PM

# Photo 3 of 3: UCIP\_FA\_2018\_51796\_69028.jpg



Concrete U shaped headwall and flap gate on WS toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.90	Rating **	A/W	Issue No.		56
LM End	5.90	Issue Type +	Ма	Location *		
Category	Supplemental				titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.11384	10°	39.113840°
пеш				-122.01773	86°	-122.017736°
DWR ID	17190					

### Inspector Comment

Comment Code

FS\_ID:51797 DS\_ID:17190 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. Pipe was field verified to be 48inch cmp. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, approximately 22 feet below the crown. Concrete headwalls at both the waterside (WS) and the landside (LS) ends with flap gate on the WS. 36-inch corrugated metal pipe (CMP) riser on the LS toe with steel pipe extension for overflow weir of LS ditch. Walkway and pump not associated with this crossing. (Automatic board order (ABO) issued as Permit No. 8234, 1972 - Glenn Irrigation District, for 36-inch, not 48-inch). [Additional Reference(s): USACE Sacramento O&M Manual 132, October 1959, (HLM 6.04, Drawing No. 50-4-3081, Sheet 16)].

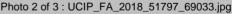
FS Date: 5/2/2017 2:33:13 PM

LM Start	5.90	Rating **	A/W	Issue No.	56 (cont)
LM End	5.90	Issue Type +	Ma	Location *	



Photo 1 of 3: UCIP\_FA\_2018\_51797\_69034.jpg

36-inch CM standpipe with steel pipe extension for weir on LS toe. pump not associated with storm drain crossing.





36-inch CM standpipe with steel pipe extension for weir on LS toe.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.90	Rating **	A/W	Issue No.		56 (cont)
LM End	5.90	Issue Type +	Ma	Location *		
Category	Suppleme	GPS Lat	itud	e/Longitude		
Calegory				Start		End
Item	DWR UCI	IP LMA Respo	onsibility	39.11384	0 °	39.113840°
item				-122.01773	6°	-122.017736°
DWR ID	17190					

### Inspector Comment

Comment Code

FS\_ID:51797 DS\_ID:17190 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. Pipe was field verified to be 48inch cmp. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, approximately 22 feet below the crown. Concrete headwalls at both the waterside (WS) and the landside (LS) ends with flap gate on the WS. 36-inch corrugated metal pipe (CMP) riser on the LS toe with steel pipe extension for overflow weir of LS ditch. Walkway and pump not associated with this crossing. (Automatic board order (ABO) issued as Permit No. 8234, 1972 - Glenn Irrigation District, for 36-inch, not 48-inch). [Additional Reference(s): USACE Sacramento O&M Manual 132, October 1959, (HLM 6.04, Drawing No. 50-4-3081, Sheet 16)].

FS Date: 5/2/2017 2:33:13 PM



Flap gate in concrete U-shaped headwall at WS toe.

## Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.96	Rating ** A/W		Issue No.		57
LM End	5.96	Issue Type +	Ma	Location *		
Category	Suppleme	GPS La	tituc	le/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.1146	33 °	39.114633°
пеш				-122.0178	48 °	-122.017848°
DWR ID	17161					

## Inspector Comment

Comment Code

FS ID:51798 DS\_ID:17161 EP\_NO: 9390

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 20.3 feet below the crown. Concrete headwall and cobble revetted spillway on the waterside (WS). Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the WS slope. Concrete headwall located on the landside (LS). (48-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 6.10)]. FS Date: 5/2/2017 2:34:03 PM

LM Start 5.96 Rating \*\* A/W Issue No. 57 (cont) Location ' 5.96 Issue Type + Ма LM End





48-inch flap gate on WS toe.

### Photo 2 of 3: UCIP\_FA\_2018\_51798\_69041.jpg



60-inch CMP riser with slide gate on WS slope.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.96	Rating **	A/W	Issue No.		57 (cont)
LM End	5.96	Issue Type +	Ма	Location *		
Category			Supplemental			
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.11463	3°	39.114633°
пеш			-122.01784	8 °	-122.017848°	
DWR ID	17161					

# Inspector Comment

Comment Code

FS ID:51798 DS\_ID:17161 EP\_NO: 9390

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 5/2/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 48-inch corrugated metal drainage pipe through the levee, 20.3 feet below the crown. Concrete headwall and cobble revetted spillway on the waterside (WS). Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the WS slope. Concrete headwall located on the landside (LS). (48-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 6.10)]. FS Date: 5/2/2017 2:34:03 PM

Photo 3 of 3: UCIP\_FA\_2018\_51798\_69040.jpg



Concrete headwall with slide gate at LS toe.

A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.98	Rating **	М	Issue No.		58	
LM End	5.98	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory						End	
Item	DWR UCI	P Field Study		39.1149	49°	39.114949°	
пеш				-122.0179	46 °	-122.017946°	
DWR ID	20715						

### Inspector Comment

Comment Code

FS\_ID:51800 DS\_ID:20715 EP\_NO: 13699

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Pipe appears to be in good condition. Minor erosion above the LS pump house. (DWR Sutter Yard-

AFreitag)10/17/2016 Crossing appears to be in good condition.

5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Oil leakage around pump.

FIELD\_STRUCT\_DESC: 1 of 2: 20-inch soil proofed steel drainage pipe through the levee, 4.4 feet below the crown. Cobble revetted sump located on the waterside (WS). Siphon breaker in a 24-inch metal riser on the WS shoulder. Pump house at the landside (LS) toe. This crossing replaces the previous 18-inch pipe listed in the O&M manual, see DS\_ID 17162. (Permit No. 13699, 1984 - Davis Ranches). [Additional Reference(s): USACE Sacramento O&M Manual 132,

October 1959, (HLM 6.13)]. FS Date: 5/2/2017 2:35:14 PM

LM Start	5.98	Rating **	М	Issue No.	58 (cont)
LM End	5.98	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_FA\_2018\_51800\_69061.jpg



Pumping plant on LS slope

### Photo 2 of 3: UCIP\_FA\_2018\_51800\_69060.jpg



Siphon Breaker on WS shoulder.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.98	Rating **	М	Issue No.		58 (cont)
LM End	5.98	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1149	49°	39.114949°
item				-122.0179	46 °	-122.017946°
DWR ID	20715					

### Inspector Comment

Comment Code

FS ID:51800 DS\_ID:20715 EP\_NO: 13699

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Pipe appears to be in good condition. Minor erosion above the LS pump house. (DWR Sutter Yard-

AFreitag)10/17/2016 Crossing appears to be in good condition.

5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Oil leakage around pump.

FIELD\_STRUCT\_DESC: 1 of 2: 20-inch soil proofed steel drainage pipe through the levee, 4.4 feet below the crown. Cobble revetted sump located on the waterside (WS). Siphon breaker in a 24-inch metal riser on the WS shoulder. Pump house at the landside (LS) toe. This crossing replaces the previous 18-inch pipe listed in the O&M manual, see DS\_ID 17162. (Permit No. 13699, 1984 - Davis Ranches). [Additional Reference(s): USACE Sacramento O&M Manual 132,

October 1959, (HLM 6.13)]. FS Date: 5/2/2017 2:35:14 PM



Pump with oil leakage shown on side of pipe.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.98	Rating **	М	Issue No.		59
LM End	5.98	Issue Type +	En	Location *		
Category Supplemental				GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.1149	63 °	39.114963°
item			-122.0179	47°	-122.017947°	
DWR ID	20716					·

### Inspector Comment

Comment Code

FS\_ID:51801 DS\_ID:20716 EP\_NO: 13699

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Pipe appears to be in good conition. Minor

erosion above the LS pump house. (DWR Sutter Yard-

AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection 12/16/2013. Same as last inspection 12/16/2013. Same as

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.7/16/2013 Same as

last inspection.10/11/2012 Oil leaks at pump head.

FIELD\_STRUCT\_DESC: 2 of 2: 20-inch soil proofed steel drainage pipe through the levee, 4.4 feet below the crown. Cobble revetted sump located on the waterside (WS). Siphon breaker in a 24-inch metal riser on the WS shoulder. Pump house at the landside (LS) toe. This crossing replaces the previous 18-inch pipe listed in the O&M manual, see DS\_ID 17162. (Permit No. 13699, 1984 - Davis Ranches). [Additional Reference(s): USACE Sacramento O&M Manual 132,

October 1959, (HLM 6.13)]. FS Date: 5/2/2017 2:36:30 PM

LM Start	5.98	Rating **	М	Issue No.	59 (cont)
LM End	5.98	Issue Type +	En	Location *	





Siphon Breaker on WS shoulder.

Photo 2 of 3: UCIP\_FA\_2018\_51801\_69063.jpg



Pumphouse on LS slope.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.98	Rating **	М	Issue No.		59 (cont)
LM End	5.98	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.11496	3°	39.114963°
item				-122.01794	7°	-122.017947°
DWR ID	20716					

## Inspector Comment

Comment Code

FS\_ID:51801 DS\_ID:20716 EP\_NO: 13699

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Pipe appears to be in good conition. Minor

erosion above the LS pump house. (DWR Sutter Yard-

AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last increasing 12/16/2013. Same as lost increasing 12/16/2013. Same as

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.7/16/2013 Same as

last inspection.10/11/2012 Oil leaks at pump head.

FIELD\_STRUCT\_DESC: 2 of 2: 20-inch soil proofed steel drainage pipe through the levee, 4.4 feet below the crown. Cobble revetted sump located on the waterside (WS). Siphon breaker in a 24-inch metal riser on the WS shoulder. Pump house at the landside (LS) toe. This crossing replaces the previous 18-inch pipe listed in the O&M manual, see DS\_ID 17162. (Permit No. 13699, 1984 - Davis Ranches). [Additional Reference(s): USACE Sacramento O&M Manual 132,

October 1959, (HLM 6.13)]. FS Date: 5/2/2017 2:36:30 PM



Pipes on LS slope.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.98	Rating **	М	Issue No.		60
LM End	5.98	Issue Type +	Ма	Location *		
Category				GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.1149	77°	39.114977°
пеш				-122.0179	47 °	-122.017947°
DWR ID	17199					

### Inspector Comment

Comment Code

FS\_ID:51803 DS\_ID:17199 EP\_NO: 9390

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Pipe appears to be in good condition. Minor

erosion above the LS pump house. (DWR Sutter Yard-

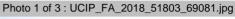
AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last increasing 12/16/2013. Same as last increasing 12/16/2013. Same as

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Minor oil leak on pump.

FIELD\_STRUCT\_DESC: 3 of 3: 18-inch steel drainage pipe through the levee, 4.4 feet below the crown. Cobble revetted sump located on the waterside (WS). Siphon breaker in a 16-inch metal riser on the WS shoulder. Pump house at the landside (LS) toe. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 6.13)].

FS Date: 5/2/2017 2:37:23 PM

LM Start	5.98	Rating **	М	Issue No.	60 (cont)
LM End	5.98	Issue Type +	Ма	Location *	





Pump house on LS slope.

Photo 2 of 3: UCIP\_FA\_2018\_51803\_69080.jpg



Siphon breaker on WS shoulder.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	5.98	Rating **	М	Issue No.		60 (cont)	
LM End	5.98	Issue Type +	Ma	Location *			
Category Supplemental			GPS Lat	itud	e/Longitude		
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	39.11497	7°	39.114977	0
item				-122.01794	7°	-122.017947	0
DWR ID	17199						

### Inspector Comment

Comment Code

FS\_ID:51803 DS\_ID:17199 EP\_NO: 9390

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Pipe appears to be in good condition. Minor

erosion above the LS pump house. (DWR Sutter Yard-

AFreitag)10/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Minor oil leak on pump.

FIELD\_STRUCT\_DESC: 3 of 3: 18-inch steel drainage pipe through the levee, 4.4 feet below the crown. Cobble revetted sump located on the waterside (WS). Siphon breaker in a 16-inch metal riser on the WS shoulder. Pump house at the landside (LS) toe. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 6.13)].

FS Date: 5/2/2017 2:37:23 PM



Pipe at exit from pumphouse.

LM Start	6.02	Rating **	U	Issue No.		37			
LM End	7.20	Issue Type +	En	Location *		LS			
Category Earthen Levee				GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachi	Encroachments				39.131618°			
item	item				08°	-122.022785 °			
DWR ID	DWR_MA0	012_01_f _ 201	8_37			·			
		Comn	nent Cod	de					
DT : Ditch									
	Inspector Comment								

### Photo 1 of 1 : FA\_2018\_MA0012\_299\_37\_20180904\_00004.jpg



View of a ditch along the landside toe.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	7.36	Rating **	С	Issue No.		41	
LM End	7.52	Issue Type +		Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory	egory		Start		End		
Item	2017 Stor	m Damage		39.13392	o°	39.136240	0
пеш				-122.02277	o°	-122.022760	0
DWR ID	DWR_MA0	012_01_f _ 201	7_41				

No Photos

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:6

Site Designation:MA12-01 Repair Type: Stability

Rating:Critical Field Date:7/14/2017

Notes: Site vegetation recently burned. Entire waterside of the levee is on a slip plane. Bulging on the toe of the levee. Same effect is beginning to be observed on the landside. Levee is between two channels of water. This site is also known as

DWR\_MA0012\_01\_R\_2012\_02 in the FSRP database. The site was temporary repaired by Sutter Maintenance Yard during December 2017. The contractor is actively repairing this site and will finish work within the next few months.

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	7.58	Rating **	М	Issue No.		61	
LM End	7.58	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Jalegory					End	
Item	DWR UCI	P Field Study		39.1371	87°	39.137187°	
пеш			-122.0227	93 °	-122.022793°		
DWR ID	17163					·	

## Inspector Comment

Comment Code

FS\_ID:51804 DS\_ID:17163 EP\_NO: 9390

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Appears abandoned- pipe capped on both ends. Should be removed. (DWR Sutter Yard-AFreitag)10/17/2016 Appears abandoned and should be removed. (DWR Sutter Yard-AFreitag)5/31/2016 Appears to be abandoned. Pipe is capped on both WS and LS ends.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Rodent burrowing along sides of pipe on LS.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe through the levee, 3 feet below the crown. Both ends capped, terminating on levee slopes. (Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 7.76)]. FS Date: 5/2/2017 2:45:44 PM

LM Start	7.58	Rating **	М	Issue No.	61 (cont)
LM End	7.58	Issue Type +	En	Location *	



Pipe on WS.

### Photo 2 of 3: UCIP\_FA\_2018\_51804\_69088.jpg



Pipe on LS.

\* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	7.58	Rating **	М	Issue No.		61 (cont)
LM End	7.58	Issue Type +	En	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category		Start		End	
Item	DWR UCI	P Field Study		39.1371	87°	39.137187 °
пеш				-122.0227	93 °	-122.022793 °
DWR ID	17163					

## Inspector Comment

Comment Code

FS\_ID:51804 DS\_ID:17163 EP\_NO: 9390

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Appears abandoned- pipe capped on both ends. Should be removed. (DWR Sutter Yard- AFreitag)10/17/2016 Appears abandoned and should be removed. (DWR Sutter Yard-AFreitag)5/31/2016 Appears to be abandoned. Pipe is capped on both WS and LS ends.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Rodent burrowing along sides of pipe on LS

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe through the levee, 3 feet below the crown. Both ends capped, terminating on levee slopes. (Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 7.76)]. FS Date: 5/2/2017 2:45:44 PM



Animal burrows along side of pipe LS.

LM Start	9.02	Rating **	A/W	Issue No.		35
LM End	9.04	Issue Type +	Ма	Location *		WS
Category			GPS Latitude/Longitude			
Category	tegory			Start		End
Item		CE Erosion S	Survey,	39.1579	57°	39.158226°
пеш	DRAFT		-122.0219	50°	-122.021950 °	
DWR ID	DWR_MA0	012_01_f _ 201	8_35			

### Inspector Comment

Comment Code

2017 Site ID: SYC 9.3 L

Status: Eroding

2017 Field Notes: Access Issues - Could not observe

Site History: 2011 - Erosion occurring upstream and downstream of an

irrigation diversion structure.

### Photo 1 of 2: FA\_2018\_MA0012\_299\_35\_20181011\_00086.jpg



View of diversion structure. Fall 2018.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

Ob: Design & System Obsolescence

En: Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ob: Design & System Obsolescence

A: Acceptable C: Corrected Ob: Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.02	Rating **	A/W	Issue No.		35 (cont)		
LM End	9.04	Issue Type +	Ma	Location *		WS		
Category Supplemental				GPS La	titud	le/Longitude		
Calegory		Start		End				
Item		2017 USACE Erosion Survey,			2017 USACE Erosion Survey, 39.157957		57°	39.158226°
item	DRAFT			-122.0219	50°	-122.021950 °		
DWR ID	DWR_MA0	012_01_f _ 201	8_35					
Comment Code								

Inspector Comment

2017 Site ID: SYC 9.3 L Status: Eroding

2017 Field Notes: Access Issues - Could not observe

Site History: 2011 - Erosion occurring upstream and downstream of an

irrigation diversion structure.



Upstream view of Colusa Basin from the diversion structure. Fall 2018.

## Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.03	Rating **	U	Issue No.		62		
LM End	9.03	Issue Type +	Ma	Location *				
Category	Supplemental			Supplemental		GPS Lat	tud	e/Longitude
Calegory			Start			End		
Item	DWR UCI	P LMA Respo	onsibility	39.15809	7 °	39.158097°		
пеш			-122.02170	3°	-122.021706°			
DWR ID	17166							

### Inspector Comment

Comment Code

FS\_ID:53012 DS\_ID:17166 EP\_NO: 9390 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Longitudinal crack observed on C-shaped headwall on WS which is tilting away from levee. Progressing erosion around headwall was observed on WS. Crossing is a part of DWR FSRP inspection. (O.Yakimov - DWR)5/2/2017 Ws headwal still appears to be tilting away from the levee. No wheel to operate the WS slidegate. (DWR Sutter Yard- AFreitag)10/17/2016 WS concrete headwall is still tiltig away from the levee. (DWR Sutter Yard-AFreitag)5/31/216 Ws concrete headwall is still tilting away from the levee and towards the WS ditch. (DWR Sutter Yard afreitag)5/4/2015 WS concrete headwall tilting away from the levee slope. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/11/2012 Concrete Headwall tilting on WS slope. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Concrete headwall, slide gate, and grouted revetment on the waterside (WS). Slide gate and concrete headwall on the landside (LS). (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.24)].



Headwall at WS toe.

FS Date: 10/5/2018 2:55:04 PM

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.03	Rating **	U	Issue No.	62 (cont)		
LM End	9.03	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.1580	97 °	39.158097°	
пеш				-122.0217	06°	-122.021706°	
DWR ID	17166						
Comment Code							

### Inspector Comment

FS\_ID:53012 DS\_ID:17166 EP\_NO: 9390 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Longitudinal crack observed on C-shaped headwall on WS which is tilting away from levee. Progressing erosion around headwall was observed on WS. Crossing is a part of DWR FSRP inspection. (O.Yakimov - DWR)5/2/2017 Ws headwal still appears to be tilting away from the levee. No wheel to operate the WS slidegate. (DWR Sutter Yard- AFreitag)10/17/2016 WS concrete headwall is still tiltig away from the levee. (DWR Sutter Yard-AFreitag)5/31/216 Ws concrete headwall is still tilting away from the levee and towards the WS ditch. (DWR Sutter Yard afreitag)5/4/2015 WS concrete headwall tilting away from the levee slope. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/11/2012 Concrete Headwall tilting on WS slope. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Concrete headwall, slide gate, and grouted revetment on the waterside (WS). Slide gate and concrete headwall on the landside (LS). (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.24)]. FS Date: 10/5/2018 2:55:04 PM



Overview of headwall at WS toe.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.03	Rating **	U	Issue No.	62 (cont)		
LM End	9.03	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category		Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.15809	)7°	39.158097°	
пеш				-122.02170	)6 °	-122.021706°	
DWR ID	17166						
Comment Code							

### Inspector Comment

FS\_ID:53012 DS\_ID:17166 EP\_NO: 9390 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Longitudinal crack observed on C-shaped headwall on WS which is tilting away from levee. Progressing erosion around headwall was observed on WS. Crossing is a part of DWR FSRP inspection. (O.Yakimov - DWR)5/2/2017 Ws headwal still appears to be tilting away from the levee. No wheel to operate the WS slidegate. (DWR Sutter Yard- AFreitag)10/17/2016 WS concrete headwall is still tiltig away from the levee. (DWR Sutter Yard-AFreitag)5/31/216 Ws concrete headwall is still tilting away from the levee and towards the WS ditch. (DWR Sutter Yard afreitag)5/4/2015 WS concrete headwall tilting away from the levee slope. (DWR Sutter Yard - afreitag)6/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/16/2013 Same as last inspection. (DWR Sutter Yard - afreitag)10/11/2012 Concrete Headwall tilting on WS slope. (DWR UCIP - wwylie) FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Concrete headwall, slide gate, and grouted revetment on the waterside (WS). Slide gate and concrete headwall on the landside (LS). (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.24)]. FS Date: 10/5/2018 2:55:04 PM



Inside view of concrete headwall and slidegate at WS toe.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.03	Rating **	М	Issue No.		63
LM End	9.03	Issue Type +	En	Location *		
Category			GPS Latitude/Longitud			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1581	24°	39.158124°
пеш			-122.0217	)1 °	-122.021701 °	
DWR ID	17165					·

### Inspector Comment

Comment Code

FS\_ID:51807 DS\_ID:17165 EP\_NO: 9390

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/2/2017 Abandoned- only LS steel walkway is visible. (DWR Sutter Yard- AFreitag)10/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)5/31/2016 Abandoned crossing.5/4/2015 Abandoned crossing.6/17/2014 Same as last

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe abandoned. Steel pump platform remains on LS slope, but all appurtances have been removed.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel drainage pipe through the levee, 3 feet below the crown. Waterside (WS) end open into concrete spill box. Pump located on the landside (LS) on steel pier. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.24)].

FS Date: 5/2/2017 2:47:45 PM

 LM Start
 9.03
 Rating \*\*
 M
 Issue No.
 63 (cont)

 LM End
 9.03
 Issue Type +
 En
 Location \*



Pump platform at center left of photo.

### Photo 2 of 3: UCIP\_FA\_2018\_51807\_69108.jpg



headwall debris on LS toe showing evidence of 18-inch cmp.

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.03	Rating **	М	Issue No.		63 (cont)		
LM End	9.03	Issue Type +	En	Location *				
Category			GPS Latitude/Longi					
Calegory	tegory		egory			Start		End
Item	DWR UC	IP Field Study		39.15812	24°	39.158124°		
пеш				-122.02170	)1 °	-122.021701 °		
DWR ID	17165							

### Inspector Comment

Comment Code

FS\_ID:51807 DS\_ID:17165 EP\_NO: 9390

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/2/2017 Abandoned- only LS steel walkway is visible. (DWR Sutter Yard- AFreitag)10/17/2016 Abandoned. (DWR Sutter Yard- AFreitag)5/31/2016 Abandoned crossing.5/4/2015 Abandoned crossing.6/17/2014 Same as last

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe abandoned. Steel pump platform remains on LS slope, but all appurtances have been removed.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel drainage pipe through the levee, 3 feet below the crown. Waterside (WS) end open into concrete spill box. Pump located on the landside (LS) on steel pier. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9390, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.24)].

October 1959, (HLM 9.24)]. FS Date: 5/2/2017 2:47:45 PM



headwall debris on LS toe showing evidence of 18-inch cmp.

LM Start	9.07	Rating **	A/W	Issue No.		39	
LM End	9.07	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Animal Co	ontrol		39.1586	63°	39.158663°	
item			-122.0217	13 °	-122.021713 °		
DWR ID DWR_MA0012_01_f _ 2018_39							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Seems to be recent activity in single hole. Recommend monitoring.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Levee Inspection Report By Mile - Fall 2018

### **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.12	Rating **	U	Issue No.		64	
LM End	9.12	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Category	ory			Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			77°	39.159477°	
пеш				-122.0218	39°	-122.021839°	
DWR ID	17167						
Comment Code							

### Inspector Comment

FS\_ID:53013 DS\_ID:17167 EP\_NO: 9389 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Flap gate was installed at WS end of the pipe. Pipe is excessively corroded looking inside from WS end. Video inspection is recommended. Cracks more than 1-inch wide were observed on WS slope around pipe alignment that may be a sign of slope instability. (O.Yakimov - DWR)5/2/2017 No repairs have been made to this crossing yet. WS flap gate is still disconnected from end of pipe and pipe is showing heavy signs of rust and deterioration as far in as i can see from the WS end. Pipe should be internally camera inspected and repaired/replaced. (DWR Sutter Yard-

AFreitag)01/31/2017 Informal Notice of Violation (NOV) was sent out January 31, 2017 by DWR Flood Maintenance Office--owner needs to re-attach flap gate to drainage pipe and coordinate with CVFPB to address additional issue(s) identified in NOV. Owner has until Monday February 27th, 2017 to repond to DWR contact: Bryan Reniff. (refer to Official Notice for details). (DWR UCIP - O. Magana) 10/17/2016 WS flapgate has seperated from the pipe end. WS pipe end is showing signs of rust and deterioration. Needs a new flapgate or other means of closing off the pipe before flood season. (DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 15.4 feet below the crown. Concrete headwall and flap gate on the waterside (WS). Concrete headwall on the landside (LS). Pump on steel structure in slough on the LS. Pump discharges into a 42-inch corrugated metal pipe (CMP) riser. Service pole on ramp.

Butterfly gate at inlet on the LS toe. (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9389, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.33)].

FS Date: 10/5/2018 3:16:10 PM



Pumping plant at LS toe.

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.12	Rating **	U	Issue No.		64 (cont)	
LM End	9.12	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			77°	39.159477°	
пеш				-122.0218	39°	-122.021839°	
DWR ID	DWR ID 17167						
Comment Code							

### Inspector Comment

FS\_ID:53013 DS\_ID:17167 EP\_NO: 9389 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Flap gate was installed at WS end of the pipe. Pipe is excessively corroded looking inside from WS end. Video inspection is recommended. Cracks more than 1-inch wide were observed on WS slope around pipe alignment that may be a sign of slope instability. (O.Yakimov - DWR)5/2/2017 No repairs have been made to this crossing yet. WS flap gate is still disconnected from end of pipe and pipe is showing heavy signs of rust and deterioration as far in as i can see from the WS end. Pipe should be internally camera inspected and repaired/replaced. (DWR Sutter Yard-

AFreitag)01/31/2017 Informal Notice of Violation (NOV) was sent out January 31, 2017 by DWR Flood Maintenance Office--owner needs to re-attach flap gate to drainage pipe and coordinate with CVFPB to address additional issue(s) identified in NOV. Owner has until Monday February 27th, 2017 to repond to DWR contact: Bryan Reniff. (refer to Official Notice for details). (DWR UCIP - O. Magana) 10/17/2016 WS flapgate has seperated from the pipe end. WS pipe end is showing signs of rust and deterioration. Needs a new flapgate or other means of closing off the pipe before flood season. (DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition. No

noticeable issues to report.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 15.4 feet below the crown. Concrete headwall and flap gate on the waterside (WS). Concrete headwall on the landside (LS). Pump on steel structure in slough on the LS. Pump discharges into a 42-inch corrugated metal pipe (CMP) riser. Service pole on ramp. Butterfly gate at inlet on the LS toe. (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9389, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.33)]. FS Date: 10/5/2018 3:16:10 PM



View inside of pipe from the WS

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.12	Rating **	U	Issue No.		64 (cont)	
LM End	9.12	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			77°	39.159477°	
пеш				-122.0218	39°	-122.021839°	
DWR ID	DWR ID 17167						
Comment Code							

### Inspector Comment

FS\_ID:53013 DS\_ID:17167 EP\_NO: 9389 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/5/2018 Flap gate was installed at WS end of the pipe. Pipe is excessively corroded looking inside from WS end. Video inspection is recommended. Cracks more than 1-inch wide were observed on WS slope around pipe alignment that may be a sign of slope instability. (O.Yakimov - DWR)5/2/2017 No repairs have been made to this crossing yet. WS flap gate is still disconnected from end of pipe and pipe is showing heavy signs of rust and deterioration as far in as i can see from the WS end. Pipe should be internally camera inspected and repaired/replaced. (DWR Sutter Yard-

AFreitag)01/31/2017 Informal Notice of Violation (NOV) was sent out January 31, 2017 by DWR Flood Maintenance Office--owner needs to re-attach flap gate to drainage pipe and coordinate with CVFPB to address additional issue(s) identified in NOV. Owner has until Monday February 27th, 2017 to repond to DWR contact: Bryan Reniff. (refer to Official Notice for details). (DWR UCIP - O. Magana) 10/17/2016 WS flapgate has seperated from the pipe end. WS pipe end is showing signs of rust and deterioration. Needs a new flapgate or other means of closing off the pipe before flood season. (DWR Sutter Yard-AFreitag)5/31/2016 Crossing appears to be in good condition.5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.6/17/2014 Same as last

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 15.4 feet below the crown. Concrete headwall and flap gate on the waterside (WS). Concrete headwall on the landside (LS). Pump on steel structure in slough on the LS. Pump discharges into a 42-inch corrugated metal pipe (CMP) riser. Service pole on ramp. Butterfly gate at inlet on the LS toe. (36-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 9389, 1974 - Annie D. Propfe). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 9.33)].

inspection.12/16/2013 Same as last inspection.7/16/2013 Same as

FS Date: 10/5/2018 3:16:10 PM

last inspection.



View of levee crown at crossing.

## **Levee Inspection Report By Mile - Fall 2018**

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	9.15	Rating **	М	Issue No.		36		
LM End	9.15	Issue Type +	Ma	Location *		LS		
Category	evee	GPS Latitude/Longitude						
Calegory				Start		End		
Item	Animal Co	Animal Control			32°	39.159932°		
item			-122.021875 °		-122.021875°			
DWR ID DWR_MA0012_01_f _ 2018_36								
		Comn	nent Cod	de				
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.								
		Inspecto	or Comm	nent				
Rodent holes on the landside slope.								



View of rodent holes on the landside slope. Fall 2018.

10.50	Rating **	С	Issue No.		38	
10.50	Issue Type +	Ма	Location *		WS	
Earthen Levee			GPS Latitude/Longitude			
Category					End	
Slope Stability			39.1740	83 °	39.174083°	
Item			-122.014320 °		-122.014320°	
DWR ID DWR_MA0012_01_s _ 2018_38						
	10.50 Earthen L Slope Sta	10.50 Issue Type + Earthen Levee Slope Stability	10.50 Issue Type + Ma  Earthen Levee  Slope Stability	10.50 Issue Type + Ma Location *  Earthen Levee GPS La  Start  Slope Stability 39.1740  -122.0143	10.50   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitud	

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Repair the vehicle erosion along the landside slope.

No Photos

## Levee Inspection Report By Mile - Fall 2018

## **Sutter Maintenance Yard Maintenance Area 0012**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	10/09/2018 10/09/2018	Zach Jojola

LM Start	10.92	Rating **	М	Issue No.		65
LM End	10.92	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	Category			Start		End
Item	DWR UCI	P LMA Respo	nsibility	39.18003	9°	39.180039°
пеш				-122.01426	6°	-122.014266 °
DWR ID	17157					

### Inspector Comment

Comment Code

FS\_ID:51810 DS\_ID:17157 EP\_NO: 9386

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/2/2017 Abandoned- needs to be done properly. (DWR Sutter Yard- AFreitag)10/17/2016 Abandoned crossing. (DWR Sutter Yard- AFreitag)5/31/2016 Abandoned crossing. Both pipe ends and slide gate inside of riser are buried.5/4/2015 Both pipe ends and slide gate in riser are plaugged with soil. Crossing is inoperable.6/17/2014 Same as last inspection.12/16/2013 Same as last inspection.7/16/2013 Same as last inspection.10/11/2012 Pipe plugged with soil on both ends as well as at slide gate on WS slope. Slide gate inoperable.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 8 feet below the crown. Slide gate in a 36-inch riser on the waterside (WS) shoulder. Levee turns eastward. (24-inch pipe [HLM 11.17] authorized under Automatic Board Order (ABO) issued as Permit No. 9386, 1974 - C. J. Wescott Jr.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 132, October 1959, (HLM 11.17)].

FS Date: 5/2/2017 2:51:53 PM

LM Start	10.92	Rating **	М	Issue No.	65 (cont)
LM End	10.92	Issue Type +	Ma	Location *	



cover on 36-inch CMP standpipe on WS slope.

Photo 2 of 2: UCIP\_FA\_2018\_51810\_69114.jpg



Bent and broken actuator on slide gate in 36-inch CMP. Pipe appears to be filled with soil.

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement